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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/730,353

12/08/2003

Ward Thomas Brown

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EXAMINER

SHOSHO, CALLIE E

ART UNIT

PAPER NUMBER

1714

MAIL DATE

DELIVERY MODE

04/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/730,353	Applicant(s) BROWN ET AL.	
	Examiner Callie E. Shosho	Art Unit 1714	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 04 April 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 01 March 2007. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☒ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

Callie E. Shosho  
Primary Examiner  
Art Unit: 1714

**Attachment to Advisory Action**

1. Applicants' request for reconsideration and 1.132 declaration filed 4/4/07 have been fully considered.

Applicants' proper statement of common ownership overcomes the 35 USC 103 rejection of record utilizing Brown et al. (U.S. 2004/0054063) as set forth in paragraph 14 of the office action mailed 12/1/06 as well as the provisional rejection under 35 USC 103 set forth in paragraph 8 of the office action mailed 12/1/06.

However, the response and 1.132 declaration do not overcome the double patenting rejection of record set forth in paragraphs 4-7 of the office action mailed 12/1/06 or the 35 USC 102 rejections of record utilizing Ma et al. (U.S. 6,247,808), Dersch et al. (U.S. 6,492,451), or Edwards et al. (U.S. 7,101,921) as set forth in paragraphs 10-12 of the office action mailed 12/1/06 for the following reasons.

Previously, the examiner argued that each of Ma et al., Dersch et al., and Edwards et al. were relevant references against the present claims under 35 USC 102 given that each reference meets the requirements in the present claims that the composition comprises a level of water-soluble polymer having second phosphorous acid groups defined by the ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups in the range less than or equal to 1.5.

In response, applicants have filed 1.132 declaration on 4/4/07 and argue that the declaration shows that a polymer made by the closest prior art, namely the polymer prepared in

Dispersion D1 of Dersch et al., fails to meet the instantly claimed ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups of less than or equal to 1.5.

However, it is the examiner's position that the declaration is not persuasive given that the declaration (i) is not commensurate in scope with the scope of Dersch et al. and (ii) does not compare with the polymer of Dersch et al. that is "closest" to the present invention.

Specifically, with respect to (i), it is noted that when making the polymer in Dispersion D1 of Dersch et al., the monomer emulsion is added over three hours and the remainder of the initiator solution over the course of four hours. However, the declaration adds the monomer emulsion over three hours and then initiator solution over another hour. Thus, while Dersch et al. add the monomer emulsion and the remaining initiator together at the same time with the monomer emulsion being added over three hours and the initiator over four hours, in the declaration it appears that the monomer emulsion is first added over three hours and then the remaining initiator solution is added for one hour, i.e. the monomer emulsion and initiator are not added at the same time. It is not clear what, if any, difference this would have on the resulting polymer. Clarification is requested. Further, it is noted that the resulting polymer dispersion of Dispersion D1 of Dersch et al. has 58.2% solids while the resulting polymer dispersion in the declaration has solids of 56.5%. Given that, as set forth on page 6 of the 1.132 declaration filed 4/4/07, the ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups is calculated using solids content, it would appear that any difference in solids content would effect this ratio. Thus, it is not clear why there is a difference in the solids content of the polymer dispersion of the declaration and the polymer dispersion of Dersch et al.

Clarification is requested. Additionally, it is noted that in the Dispersion D1 of Dersch et al. following polymerization, the pH is adjusted to 7.3 while in the declaration the pH is adjusted to 7.4. It is not clear what, if any, difference this would have on the resulting polymer. Clarification is requested.

With respect to (ii), it is noted that the 1.132 declaration states that Dispersion D1 is the closest described polymerization to the claimed invention, however, it is not clear how applicants determined that the polymer of Dispersion D1 provides the closest comparison. This is significant given that the polymer of Dispersion D2 comprises more vinyl phosphonic acid in the monomer emulsion and higher solids content for the resulting polymer dispersion than the polymer of Dispersion D1 and given, as set forth on page 6 of the 1.132 declaration filed 4/4/07, that the amount of vinyl phosphonic acid and the solids content both effect the ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups. When utilizing the same calculations on page 6 of the declaration but utilizing values from Dispersion D2 of Dersch et al., i.e. substituting 59.9% solids content of the polymer dispersion for 56.5% and 1.7% vinyl phosphonic acid (amount present in the polymer) for 1.1%, it is calculated that the ratio of equivalents of second phosphorous acid groups to first phosphorous acid groups is 1.24 ( $0.2005/0.1616$ ) which falls within the scope of the present claims. Further, the 1.132 declaration is not persuasive given that it only calculates the ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups for one amount of vinyl phosphonic acid. It is noted that col.3, line 65-col.4, line 3 of Dersch et al. discloses that the amount of phosphorous acid containing monomer of the polymer ranges from 0.1-10%. However, applicants have not provided data regarding the ratio of equivalents of second

phosphorous acid groups to equivalents of first phosphorous acid groups when the polymer possesses phosphorous acid monomer in amounts at the middle and upper end of the range disclosed by Dersch et al.

It is noted that even if it was the examiner's position that the declaration was persuasive to overcome the rejection of record utilizing Dersch et al. and thus, Ma et al., such declaration would not overcome the rejection of record with respect to Edwards et al.

Paragraph 7 of the declaration states, and the examiner agrees, that Dersch et al. represents the only cited art in which any example includes a phosphorous acid monomer. However, "applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others," *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). Further, "nonpreferred disclosures can be used. A nonpreferred portion of a reference disclosure is just as significant as the preferred portion in assessing the patentability of claims," *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). A fair reading of Edwards et al. as a whole clearly discloses polymer obtained from phosphorous acid monomer.

Further, the declaration is not persuasive with respect to Edwards et al. given that the teachings of Edwards et al. and Dersch et al. are not sufficiently similar to each other that establishing that the polymer of Dersch et al. does not meet the presently claimed ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups also establishes that the polymer of Edwards et al. does not meet this ratio. This is especially significant given that Edwards et al. discloses a multistage polymer prepared by emulsion

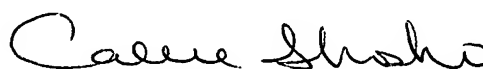
polymerization wherein the pH is less than 8 (i.e. encompasses pH less than 2) and thus the process for making the polymer of Edwards et al. would necessarily be different than the process used to make the polymer of Dersch et al. Additionally, it is noted that there is no disclosure in Edwards et al. that the polymer is obtained from vinyl phosphonic acid monomer as is the polymer of Dersch et al. Thus, the polymer of Dersch et al. set forth in the declaration is outside the scope of Edwards et al. Such differences, i.e. different type of monomer and different type of polymer, would effect the ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups. Further, it is noted that not only is Edwards et al. applied against present claim 18, as is Dersch et al., but also against present claim 1. Given that claim 1 requires multistage polymer that is not disclosed by Dersch et al., it is the examiner's position that a declaration showing that the polymer of Dersch et al. does not meet the presently claimed ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups of present claim 18 does not also establish that the multistage polymer of Edwards et al. does not meet the requirements of present claims 1 and 18. Applicants have not shown that a multistage polymer as disclosed by Edwards et al. does not possess the ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups as presently claimed.

In light of the above, it is the examiner's position that a proper declaration establishing that the polymer of Dersch et al. does not meet the claimed ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups would not also establish that the polymer of Edwards et al. does not meet such ratio.

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With respect to the double patenting rejection of record, it is noted that while the statement of common ownership overcomes the provisional rejection of the present claims under 35 USC 103 with respect to copending 10/642,791 (Brown et al.), such statement does not overcome the double patenting rejection of record set forth in paragraphs 4-7 of the office action mailed 12/1/06.

CS  
4/18/07



Callie E. Shosho  
Primary Examiner  
Art Unit 1714